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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,642	01/04/2002	Thomas J. Conway	56995US002	9185

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EXAMINER

NORDMEYER, PATRICIA L

ART UNIT	PAPER NUMBER
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1772

10

DATE MAILED: 11/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/038,642

Applicant(s)

CONWAY ET AL.

Examiner

Patricia L. Nordmeyer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 and 46-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 and 46-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- ☐ Interview Summary (PTO-413) Paper No(s) _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other:

DETAILED ACTION

Withdrawn Rejections

1. The 35 U.S.C. 112 2nd paragraph rejection of claim 17 of record in Paper #8, Page 3, Paragraph 5 is withdrawn due to Applicant's amendment in #9.

Repeated Rejection

2. The 35 U.S.C. 112 1st paragraph rejection of claims 1 – 22 and 46 – 48 of record in Paper #8, Page 2, Paragraph 3 is repeated for the reasons stated previously in Paper #8.

Claims 1 – 22 and 46 – 48 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification fails to describe the non-metallic multi-layer optical film in such a manner that one of ordinary skill in the art would be enabled to duplicate it. On page 2, line 4, the film is described as an IR reflective film, which when the term was searched, the resulting films included a metal layer not desired by the applicant, resulting in one of ordinary skill not being able to reproduce the invention from the specification.

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3. The 35 U.S.C. 102 rejection of claims 1 – 22 and 46 – 48 as anticipated by Frost et al. of record in Paper #8, Pages 4 – 5, Paragraph 7 is repeated for the reasons stated previously in Paper #8.

Frost et al. discloses a laminated glass sheet used in windshields for vehicles (Column 1, lines 7 – 8) containing two glass substrates, glazing components, having a surface and peripheral edges (Column 13, line 6 and Figure 1, #1 and 2) surrounding a multi-layer intermediate film having layers that each have a two major surfaces and peripheral edges made from a layer of PET (Column 13, lines 6 – 7 and Figure 1, #5) in between two plies of thermoplastic polymer of polyvinyl butyral, which are bonded to the glass substrate (Column 13, lines 9 – 10 and Figure 1, #4 and 6). The intermediate film is cut into a size that is identical, where it falls into the peripheral edge of the substrate, or larger, where it extends past the edges, than the glass substrates (Column 2, lines 6 – 9). An incision, or slit, is also made into the intermediate film (Column 2, lines 10 – 14). This enables the excess material to be removed from between the two substrates so the intermediate film is completely within the peripheral edges of the substrates (Column 2, lines 20 – 21), and it also helps control the corrosive risks (Column 3, lines 27 – 31). The intermediate film layers are bonded together and to the glass substrate through lamination by polyvinyl butyral or polyurethanes (Column 4, lines 7 – 15). The edges of the polyvinyl butyral bond together to form an impervious seam along the peripheral edges while fully bonding to both the glass substrates and the multi-layer intermediate film through the application of heat and pressure (Column 4, lines 25 – 45).

Response to Arguments

4. Applicant's arguments filed in Paper #9 regarding the 112 1st paragraph rejection of claims 1 – 22 and 46 – 48 have been fully considered but they are not persuasive.

In response to Applicant's argument to look at the U.S. patents and PCT publications listed on page 13, lines 11 – 21 of the specification, the Examiner has looked at the references, and each one states the presence of metal material in the patent. In order for to try and get a better understanding of the claimed article, the Examiner has also searched the term "IR reflective film", found on page 2, line 4 of the specification which is used to describe the invention, and the prior art that was found also contains metal. Therefore, one of ordinary skill in the art would not be able to reproduce the invention from the specification since all key terms describe articles which contain metal, the non-desired element.

5. Applicant's arguments filed in Paper #9 regarding the 102 rejection of claims 1 – 22 and 46 – 48 as anticipated by Frost et al. have been fully considered but they are not persuasive.

In response to Applicant's argument that Frost et al. teach the cutting back of a metallic IR reflective film and not a non-metallic IR reflective film as claimed, Frost et al. states that a metal film can be chosen to endow the glazing component with thermal properties (Column 4, lines 58 – 67). The language of Frost et al. is stated so that the metal layer is optional, not required, to be present in the claimed article. This is represented by the language of claim 1 (Column 13, lines 5 – 19), which states that a ply of PET containing an opening in the surface

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and a functional layer of PVB are encased between two substrates of glass material without the presence of a metallic layer.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Nordmeyer whose telephone number is (703) 306-5480. The examiner can normally be reached on Mon.-Thurs. from 7:00-4:30 & alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on (703) 308-4251. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Patricia L. Nordmeyer
Examiner
Art Unit 1772

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pln

[Signature]
HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

11/19/03